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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/643,918

08/20/2003

Ryoichi Nozawa

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02/07/2006

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER

SANTIAGO, MARICELI

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/643,918

**Applicant(s)**

NOZAWA, RYOICHI

**Examiner**

Mariceli Santiago

**Art Unit**

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 13 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/7/2005</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

The Amendment, filed on January 13, 2006, has been entered and acknowledged by the Examiner.

Cancellation of claims 7-12 has been entered.

Claims 1-6, 13 and 14 are pending in the instant application.

Upon further consideration applicant's request for reconsideration of the finality of the rejection of the last Office action, in regards to the rejection of claim 14 is persuasive and, therefore, the finality of that action is withdrawn.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimoda et al. (US 2002/0158577) in view of Murade (JP 2001-166311A).

Regarding claims 1, 2 and 13, Shimoda discloses an electronic apparatus equipped (Figs. 5-7) with an organic electroluminescent device (Figs. 1-3) having a plurality of light emitting parts (25), comprising a concave part (11) formed on the substrate (10), a power connection part (12) formed in the concave part, the power connection part supplying power to each of the plurality of light emitting parts (25, Fig. 3), a first electrode (21) formed above at least part of the power connection part and connect to the power connection part, a light emitting layer (24) formed above the first electrode and a second electrode (26) formed above

the light emitting layer. Shimoda fails to disclose the concave part formed in a material layer provided on a substrate. However, in the same field of endeavor, Murade discloses a TFT substrate assembly comprising a concave part formed in a material layer made of insulating material, provided on a concave part formed on a substrate, and a power connection part (TFT) formed in the concave part (Fig. 3). The insulating layer is use in order to prevent degradation of the TFT element for pixel switching by any remaining dirt left after cleaning the TFT array substrate, which has been previously polished (Paragraph [0051]). Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to incorporate the material layer disclosed by Murade in the device of Shimoda to further prevent degradation of the TFT element due to the presence of dirt in the substrate that has been polished.

Regarding claim 3, Shimoda discloses an organic electroluminescent device wherein the concave part is formed in a tapered shape narrowing toward the substrate (Fig. 3).

Regarding claim 4, Shimoda discloses an organic electroluminescent device wherein a top face of the substrate in which the concave part is formed is substantially continuous with top faces of the power connection part disposed in the concave parts (Fig. 3).

Regarding claim 5, Shimoda discloses an organic electroluminescent device wherein at least a portion of each of the light emitting parts being overlapped with each of power connections parts (Fig. 3).

Regarding claim 6, Shimoda discloses an organic electroluminescent device wherein the light emitting parts are organic electroluminescent elements (Paragraph [0033]).

Claims 1-6, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hadley et al. (US 6,590,346) in view of Murade (JP 2001-166311A).

Regarding claims 1, 2 and 13, Hadley discloses an electronic apparatus equipped (Figs. 2B-2C) with an organic electroluminescent device (Column 9, lines 26-40) having a plurality of light emitting parts (defined by pixels), comprising a concave part (Fig. 2B, Column 5, lines 11-13) formed on the substrate (202), a power connection part (circuitry containing blocks 212 and wiring lines 204 and 212, Column 4, lines 31-60, Column 6, lines 39-54 and Column 10, lines 8-34) formed in the concave part, the power connection part supplying power to each of the plurality of light emitting parts (Column 6, lines 39-54 and Column 10, lines 8-34), a first electrode (205, Column 8, lines 47-64) formed above at least part of the power connection part and connect to the power connection part, a light emitting layer (218) formed above the first electrode and a second electrode (222) formed above the light emitting layer. Hadley fails to disclose the concave part formed in a material layer provided on a substrate. However, in the same field of endeavor, Murade discloses a TFT substrate assembly comprising a concave part formed in a material layer made of insulating material, provided on a concave part formed on a substrate, and a power connection part (TFT) formed in the concave part (Fig. 3). The insulating layer is use in order to prevent degradation of the TFT element for pixel switching by any remaining dirt left after cleaning the TFT array substrate, which has been previously polished (Paragraph [0051]). Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to incorporate the material layer disclosed by Murade in the device of Hadley to further prevent degradation of the TFT element due to the presence of dirt in the substrate that has been polished.

Regarding claim 3, Hadley discloses an organic electroluminescent device wherein the concave part is formed in a tapered shape narrowing toward the substrate (Fig. 2C).

Regarding claim 4, Hadley discloses an organic electroluminescent device wherein a top face of the substrate in which the concave part is formed is substantially continuous with top faces of the power connection part disposed in the concave parts (Fig. 2C).

Regarding claim 5, Hadley discloses an organic electroluminescent device wherein at least a portion of each of the light emitting parts being overlapped with each of power connections parts (Fig. 2C).

Regarding claim 6, Hadley discloses an organic electroluminescent device wherein the light emitting parts are organic electroluminescent elements (Column 12, lines 20-24).

Regarding claim 14, Hadley discloses an organic electroluminescent device (Figs. 2B-2C) having a plurality of light emitting parts (defined by pixels), comprising a concave part (Fig. 2B, Column 5, lines 11-13) formed on the substrate (202), common feeders (wiring lines 204 and 212, Column 6, lines 39-54 and Column 10, lines 8-34) formed in the concave part, the common feeders supplying power to each of the plurality of light emitting parts (Column 6, lines 39-54 and Column 10, lines 8-34), a first electrode (205, Column 8, lines 47-64) formed above at least part of the common feeders, a light emitting layer (218) formed above the first electrode and a second electrode (222) formed above the light emitting layer. Hadley fails to disclose the concave part formed in a material layer provided on a substrate. However, in the same field of endeavor, Murade discloses a TFT substrate assembly comprising a concave part formed in a material layer made of insulating material, provided on a concave part formed on a substrate, and a power connection part (TFT) formed in the concave part (Fig. 3). The insulating layer is use in order to prevent degradation of the TFT element for pixel switching by any remaining dirt left after cleaning the TFT array substrate, which has been previously polished (Paragraph [0051]). Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to incorporate the material layer disclosed by Murade in the

device of Hadley to further prevent degradation of the TFT element due to the presence of dirt in the substrate that has been polished.

### ***Response to Arguments***

Applicant's arguments filed January 13, 2006 have been fully considered but they are not persuasive.

In regards to applicant's contention that the applied prior art reference to Shimoda et al. (US 2002/0158577) fails to teach the limitation of "power connection part formed in the concave part" since the element 14 of Fig. 4 is not located in the convave portion but above it, the examiner respectfully disagrees with applicant's characterization of the "power connection part" in Fig. 4. Applicant's specification defines the power connection part as including switching elements and wiring connections lines (see Paragraph [0019]), accordingly, the prior art reference discloses at least switching elements (12) which are formed in the concave part, thus, reading on the limitation of claim 1. Moreover, applicants do not make reference in the claims to exclude embodiments in which at least a section of the power supply part (e.g., wiring lines, etc.) extends outside the concave portion.

For the reasons stated above the rejection of claims 1-6 under the Shimoda reference is deemed proper.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2879

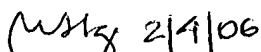
the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Mariceli Santiago  
Primary Examiner  
Art Unit 2879